28. An oligonucleotide OY of claim 27 wherein Y_2 is a trinucleotide which codes for Gly, Y_3 is a trinucleotide which codes for Lys, Y_4 is a trinucleotide which codes for Arg and Y_5 is a sequence of 3 trinucleotides which code for Ser-Ala-glu.

29. A single-stranded oligonucleotide OZ comprising 15 to 39 nucleotides and hybridizes under mild or stringent conditions with a consensus signal characteristic of amidated polypeptide hormones with the sequence having the formula

$$Z_1\text{-}Z_2\text{-}Z_3\text{-}Z_4\text{-}Z_5\text{-}Z_6\text{-}Z_7$$

wherein Z_1 is a nucleotide sequence of 1 to 12 nucleotides or is absent, Z_2 and Z_3 are two trinucleotides which code for Leu, Z_4 and Z_5 are two trinucleotides which code for any two amino acids, Z_6 is a trinucleotide which codes for Leu and Z_7 is a nucleotide sequence of 1 to 12 nucleotides or is absent.

30. A group of oligonucleotides OZ of claim 29 which constitute a combinational library.

31. A method for identifying the non-amidified precursor of a peptide having an amidated C-terminal end comprising 1) obtaining a DNA sample, 2) amplifying the fragment of interest by PCR technique with a group of oligonucleotides of claim 26, 3) identifying the DNA sequence(s) of the DNA sample which hybridize with the oligonucleotide of claim 26 and 4) identifying in the sequence(s) of at least one non-amidified precursor of peptides with an optional amidated C-terminal end.

32. The method of claim 31 wherein the amplification is effected with a combinational library of claim 30.--